We claim:

1. A method comprising

providing at least one of a microdevice and a nanodevice; and

inserting at least one of said microdevice and said nanodevice into a fluid stream within a body.

2. The method of claim 1, further comprising the step of inserting at least one of said microdevice and said nanodevice into a cell.

3. The method of claim 2, wherein said cell is a red blood cell.

4. The method of claim 1, wherein the step of inserting further comprises the step of inserting the substrate into said cell via at least one of reversible osmotic lysis, electroporation, microfine needle injection, and particle gun injection.

5. The methodof claim 1, wherein said biological member is selected from the group consisting of a blood-cell, lipid molecules, a liver cell, a nerve cell, a skin cell, a bone cell, a lymph cell, an endocrine cell, a circulatory cell, and a muscle cell.

6. The method of claim 1, wherein at least one of said nanodevice and said microdevice is selected from the group consisting of a diagnostic system, a transmitter, a receiver, a battery, a transistor, a capacitor, and a detector.

7. The method of claim 1, wherein at least one of said nanodevice and said microdevice is inserted within said biological member.

8. The method of claim 1, wherein said biological member is one of a red blood cell and lipid molecules.

9. The method of claim 1, wherein at least one of said nanodevice and said microdevice has a substrate selected from the group consisting of Gallium Arsenide, silicon, and silicon oxides.

10. The method of claim 1, wherein at least one of said nanodevice and said microdevice is formed using one of optical lithography, electron beam lithography, ion beam lithography, X-ray lithography, and spatial phase-locked electron beam lithography.

11. The method of claim 1, wherein at least one of said nanodevice and said microdevice is a resonance type nanodevice.

12. The method of claim 1, wherein at least one of said nanodevice and said microdevice is adapted for detection by one of electron paramagnetic resonance (EPR), electron spin resonance (ESR) and nuclear magnetic resonance (NMR).

13. The method of claim 1, wherein EPR detects molecules selected from the group consisting of free radicals, odd electron molecules, transition metal complexes, lanthanade ions and triplet state molecules.

14. The method of claim 1, wherein at least one of said nanodevice and said microdevice includes a material selected from the group consisting of phosphorus, arsenic, sulfur, germanium and organic free radicals.

15. A method comprising:

providing at least one of a nanodevice and a microdevice; and

inserting at least one of said nanodevice and said microdevice in a fluid stream within a body, wherein at least one of said nanodevice and said microdevice is extracellular.

16. The method of claim 15, further comprising the step of chemically modifying at least one of said nanodevice and said microdevice such that it is adapted to prolong vascular retention, prevent immunologic detection, or prevent unwanted endocytosis by cells.

17. The method of claim 15, further comprising the step of chemically modifying at least one of said nanodevice and said microdevice with an organo hydroxyl.

18. The method of claim 17, wherein said organo hydroxyl group is selected from the group consisting of poly (ethylene glycol), methoxypoly (ethylene glycol).

19. The method of claim 15, further comprising attaching a lipid anchor to at least one of said nanodevice and said microdevice with an organo hydroxyl.